case.

SUMMARY OF ARGUMENT

In *Daubert*, 509 U.S. at 589, the Court emphasized the obligation of the trial court to serve as a "gatekeeper," guarding the courthouse against untrustworthy expert testimony. The Court tasked district courts with screening proffered expert testimony to ensure that what is admitted "is not only relevant, but reliable." *Id.*

The Court should grant certiorari in this case to preserve both the letter and spirit of *Daubert*. It has been nearly fifteen years since the decision was rendered. As might be anticipated over such a significant period of time, key differences have arisen in its interpretation. This case presents the Court with a unique opportunity to provide guidance on not one or two, but three key areas of division:

First, may a court consider an expert's conclusions or must the court focus solely on the expert's methodology in determining reliability? Second, does *Daubert* require a heightened level of relevance beyond that ordinarily required by Federal Rule of Evidence 401? Third, does an expert's failure to test a theory, when readily verifiable through testing, render it unreliable and inadmissible?

If courts improperly interpret any one of these key areas, *Daubert* is drained of its meaning and purpose. A court's improper interpretation of all three, such as here, can and did render the *Daubert* truth-finding purpose meaningless.

The rulings of the Tenth Circuit in this case and other courts taking a similar approach threaten to diminish *Daubert's* principal public policy purpose: to help assure that the trier of fact determines the truth in cases involving expert testimony. While some courts have closely adhered to *Daubert*'s principles, others, such as the Tenth Circuit, have adopted an interpretation that (1) disregards the reliability of

conclusions that do not flow from the facts of the case or the expert's analysis; (2) applies the minimal relevancy requirement favoring admission of ordinary evidence, rather than the heightened requirement that expert testimony "fit" the specific case; and (3) renders testing of scientific or technical theories wholly optional, even when such verification is readily available. The combination of the "wrong turn" on all three issues, which occurred in this case, substantially undermines *Daubert*'s gatekeeping process and truth-finding purpose.

This Court has a strong interest in assuring that its sound public policy be preserved. For these reasons, the Petition for Writ of Certiorari should be granted.

ARGUMENT

I. THE LETTER, PURPOSE AND SPIRIT OF *DAUBERT*

Expert witnesses are given extraordinary privileges in court. Unlike lay witnesses, "an expert is permitted wide latitude to offer opinions, including those that are not based on firsthand knowledge or observation." *Daubert*, 509 U.S. at 592. Experts are unique in that their testimony may be based on evidence that otherwise would not be admissible. *See* Fed. R. Evid. 703. For example, experts are allowed to disclose hearsay and other evidence for the limited purpose of justifying their opinions, even if such information is inadmissible for its truth. *See Daubert*, 509 U.S. at 593; *see also Engebretsen v. Fairchild Aircraft Corp.*, 21 F.3d 721, 728-29 (6th Cir. 1994); *United States v. Sowards*, 339 F.2d 401, 402 (10th Cir. 1964). In addition, courts may permit expert witnesses to testify on the ultimate issue to be decided by the jury. *See* Fed. R. Evid. 704(a).

Expert testimony is, by definition, outside the realm of an ordinary juror's scope of knowledge. As this Court recognized in *Daubert*, "Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it." *Daubert*, 509 U.S. at 595 (quoting Jack B. Weinstein, *Rule 702 of the Federal Rules of Evidence is Sound; It Should Not be Amended*, 138 F.R.D. 631, 632 (1991)). It often addresses an "unfamiliar and esoteric field." *Tabatchnick v. G. D. Searle & Co.*, 67 F.R.D. 49, 55 (D.N.J. 1975). Moreover, "[e]vidence that purports to be based on science beyond the common knowledge of the average person that does not meet the judicial standard for scientific validity can mislead, confuse, and mystify the jury." *State v. O'Key*, 899 P.2d 663, 678 n.20 (Or. 1995). In addition to overwhelming the jury, and regardless of whether such testimony is labeled scientific or technical, "[t]here are a score of other concerns associated with experts who lack a reliable basis for their opinion, ranging from their introducing evidence that is otherwise inadmissible to prolonging litigation and wasting time and judicial resources." David L. Faigman et al., *How Good is Good Enough?, Expert Evidence Under Daubert and Kumho*, 50 Case W. Res. L. Rev. 645, 648-49 (2000).

For these reasons, the Court recognized in *Daubert*, and later in *General Electric Co. v. Joiner*, 522 U.S. 136 (1997) and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), that expert testimony must be subject to a strong and careful judicial gatekeeper function in order to protect a fundamental tenant of justice: finding the truth. As this Court has recognized, the gatekeeper function is not at odds with the jury system. It helps it function properly. The Court instructed district courts, in determining whether expert testimony is reliable, to consider whether a theory or technique has been tested; whether it has been subjected to peer review and publication; whether there is a significant potential rate of error; whether there are standards controlling the technique's op-

eration; and whether the theory or technique enjoys "general acceptance" within a "relevant scientific community." *Kumho Tire*, 526 U.S. at 149-50 (citing *Daubert*, 509 U.S. at 592-94). In providing these factors, the Court required district court judges to carefully screen expert testimony to ensure that it leads the jury to the truth. *Daubert* and its progeny "changed the deference-to-the-field approach . . . [and] brought a scientific culture to the courtroom." Faigman, *supra*, at 655-56.

Coinciding with the Court's decision in *Daubert* was the emergence of toxic torts and the burgeoning use of experts in civil litigation. *See, e.g.*, Joseph Sanders, *From Science to Evidence: The Testimony on Causation in the Bendectin Cases*, 46 Stan. L. Rev. 1, 31-32 (1993) (citing studies that found a 1500 percent rise in the number of experts testifying in Cook County, Illinois between 1974 and 1989, and finding that experts testified in 86 percent of all cases, 95 percent of personal injury cases and 100 percent of product liability cases in a sample of California cases in 1985 and 1986). The "battle of experts" continues today, and the need for *Daubert* protections is as great, if not more so, as it was twenty years ago. As Justice Breyer has recognized, "there is an increasingly important need for law to reflect sound science." Stephen G. Breyer, *The Interdependence of Science and Law*, 280 Sci. 537 (1998).

Bad science presented as fact by experts can result in removal of beneficial products from the market and has had profound effects on the American economy. *See id.* (recognizing that scientific inaccuracy in the courtroom can force the abandonment of products and "improperly deprive the public of . . . important benefits – those surrounding a drug that cures many while subjecting a few to less serious risks, for example"). For instance, Bendectin, the product that eventually led to the Court's ruling in *Daubert*, was removed

from the market in 1983, leaving no Food and Drug Administration-approved drug for the treatment of morning sickness in early pregnancy. *See* Barbara Culliton, *Merrell Dow Stops Marketing Bendectin*, 221 Sci. 37 (1983). Despite overwhelming scientific evidence finding no link between the drug and birth defects, several juries, adrift in a sea of conflicting "expert" testimony, rendered multimillion dollar awards after hearing expert evidence to the contrary. *See generally* Sanders, *supra;* Richard B. Stewart, *Regulatory Compliance Preclusion of Tort Liability: Limiting the Dual Track System*, 88 Geo. L.J 2167, 2171-72 (2000). The Bendectin situation is not unique. Silicone breast implant litigation forced Dow Corning to file Chapter 11 bankruptcy in 1995, despite the fact that medical evidence found no link between implants and autoimmune disorders, cancer or any other disease. *See* Marcia Angell, *Science on Trial: The Clash of Medical Evidence and the Law in the Breast Implant Case* 90-110 (1996) (authored by the executive editor of the *New England Journal of Medicine*).

Whether or not courts exclude unreliable expert testimony has a real impact on the outcome of such litigation. *See* James T. Rosenbaum, *Lessons from Litigation Over Silicone Breast Implants: A Call for Activism by Scientists*, 276 Sci. 1524 (1997) (discussing actions of some federal judges to exclude expert testimony that was not scientifically sound in the Bendectin and silicone breast implant litigation). Even where there is no potentially broad harm to society, admitting unreliable expert testimony can unjustly harm a defendant where its product or conduct was not the cause of the plaintiff's injury. The instant case is not alone in this crucial respect.

Those seeking to evade *Daubert* may unduly emphasize language in the Court's opinion in which it explained that it provided a "flexible" approach and did not intend to provide

a "definitive checklist or test" for determining whether a theory or technique is reliable. 509 U.S. at 593-94. This qualification, however, stemmed from the possibility that, in some circumstances, testing for one or more of the other factors discussed by the court might not be feasible or applicable in a particular case. *See Kumho Tire*, 526 U.S. at 150. As Members of this Court cautioned at that time, "the discretion it endorses – trial-court discretion in choosing the manner of testing expert reliability – is not discretion to abandon the gatekeeping function." *Id.* at 158-59 (Scalia, J., concurring, joined by O'Connor and Thomas, JJ.). Likewise, the Fifth Circuit has warned, "*Kumho Tire*'s emphasis on the word 'may' should not be misunderstood to grant open season on the admissibility of expert testimony by permitting courts to discretionarily disavow the *Daubert* factors." *Black v. Food Lion Inc.*, 171 F.3d 308, 311 (5th Cir. 1999).

II. THE TENTH CIRCUIT RULING FAILS TO UPHOLD THE PRINCIPLES OF *DAUBERT*

Here, there were two competing causes to explain the explosion in the plaintiffs' basement: (1) a gas leak stemming from a "T-connector" in the copper line that supplied the water heater and a space heater; or (2) a gas leak stemming from a defective safety valve in the propane gas control manufactured by the defendant. (Pet. App. at 35a.) In such a situation, causation is the primary issue in the case.

The plaintiffs' experts on causation, Donald Sommer and Elden Boh, testified that the explosion resulted from an intermittent leak in the gas control. (*See* Pet. App. at 35a.) They supported the plaintiffs' theory that tiny copper sulfide particles passed through or around the mesh screen positioned at the inlet and, combining with grease on the seat of the safety valve, prevented the valve from fully shutting when the pilot light went out. (*See* Pet. App. at 35a.) The experts provided a perfectly reasonable *hypothesis*, an edu-

cated guess – but their testimony did not approach the level of scientific reliability necessary to reach a jury as required by this Court. In essence, their method was guesswork, their testing was nonexistent, and their conclusion flowed from this process.

The United States District Court for the District of Colorado failed to fulfill its obligation to serve as a gatekeeper. In ruling on the defendants' motions for summary judgment, the District Court recognized that Mr. Sommer did not conduct any laboratory tests on the gas control safety valve or inlet screen to validate his theory, but found instead that "defendants place too much emphasis on a mechanical application of the *Daubert* factors." (Pet. App. at 48a.) The court found that *Daubert*'s requirements were relaxed when an expert's theory is not new and novel. (*See* Pet. App. at 49a-50a, 55a.) With respect to Mr. Boh, the district court found that his personal experience and observations rendered his testimony sufficiently reliable, even if he could not explain how the valve malfunctioned or why the T-connector was not responsible for the explosion. (*See* Pet. App. at 43a-45a.) The district court's analysis focused exclusively on the grounds supporting the experts' methodology, finding that any gap between the analysis and conclusion went to the weight of the testimony, not its admissibility. (*See* Pet. App. at 54a.) The case, including the expert testimony, was submitted to a jury, which returned a verdict of approximately $2.3 million.

The Tenth Circuit affirmed in an opinion that, if allowed to stand, would steer district courts away from their gatekeeping obligation. *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1230 (2004). The Tenth Circuit's signal would direct district courts back toward the pre-*Daubert* days of letting both good and bad expert testimony "go to the jury." In addition to not applying its gatekeeper function to two experts'

unfounded conclusions, the Tenth Circuit found that *Daubert*'s requirement that expert testimony "fit" the facts of the case meant no more than that the evidence have the minimal relevancy required by Federal Rule of Evidence 401. *Id.* at 1234. The Tenth Circuit reduced the importance of testing to questions involving "causal relations among regularly occurring natural phenomena" or novel theories. *Id.* at 1235. The Tenth Circuit further found that although "differential diagnosis" is a method ordinarily limited to the medical context, "in this circumstance it is a valid scientific technique to establish causation" – even though it is a highly dissimilar situation. *Id.* at 1236. In sum, the Tenth Circuit found that Mr. Sommer and Mr. Boh were permitted to testify as experts on the ultimate issue in the case based on a highly relaxed *Daubert* review of their methodology and conclusion.

III. OVER TWELVE YEARS OF LITIGATION HAVE PRODUCED DIVISION AMONG THE CIRCUITS ON THREE CRUCIAL ISSUES

Over the past twelve years, key differences have arisen in the interpretation of *Daubert*. Courts have applied this Court's dictates with various levels of rigor. *See* Richard T. Stilwell, *Kuhmo Tire: The Battle of the Experts Continues*, 19 Rev. Litig. 193, 210-23 (2000) (examining differences in the evaluation of expert testimony among several Circuit Courts). This case presents the Court with a unique opportunity to provide guidance on three key areas of division. The combination of these issues, each incorrectly decided below, substantially undermines both the letter and spirit of *Daubert*. First, may a court consider an expert's conclusions or must the court focus solely on the expert's methodology in determining reliability? Second, does *Daubert* require a heightened level of relevance beyond that ordinarily required by Federal Rule of Evidence 401? Third, does a proffered

expert's failure to test a theory, when readily verifiable through testing, render it unreliable and inadmissible?

A. May a Court Consider an Expert's Conclusions or Must the Court Focus Solely on the Expert's Methodology?

As a matter of basic logic in the search for the truth, *Daubert* principles must be applied to both an expert's methodology and conclusions. Experts, unlike lay witnesses, are permitted to reach conclusions on the ultimate issue in the case. For that very reason, it is particularly important to ensure that experts' conclusions flow from their methodology before they are placed before the jury or finder of fact. To paraphrase Justice Cardozo, conclusions in the air, so to speak, will not do. *See Palsgraf v. Long Island R.R.*, 162 N.E. 99, 99 (N.Y. 1928).

This Court recognized this key factor in *General Electric Co. v. Joiner* when it found that "conclusions and methodology are not entirely distinct from one another." 522 U.S. 136, 146 (1997). When experts' conclusions do not follow from the science, data, or other facts supporting their theories, there is "simply too great an analytic gap" to admit the testimony. *Id.*

The Tenth Circuit gave lip service to this Court's clarification in *Joiner*. The Tenth Circuit's analysis focused exclusively on the experts' methodology, disregarding that the experts' conclusions did not, as a matter of good science, flow from their theoretical analysis. The Tenth Circuit found that just because it is well-documented that *large* copper sulfide particles can cause leaks on water heaters *without* a mesh inlet screen, the experts' could conclude that *tiny* particles could surpass the protective screen of the water heater at issue and cause an intermittent gas leak. Even if the experts' methodology is sound – a highly dubious assumption given their lack of testing – their conclusion does not flow from the

evidence. This is the type of "analytic gap" that the Court warned about in *Joiner*.

As Petitioners recognize, several circuit courts, apparently confused by the conflicting language in *Daubert* and *Joiner*, have focused solely on an expert's methodology in determining reliability, while permitting conclusions, which may lack reliability, to slip through the gate. (Pet. Writ Cert. at 12-14.) Others have properly recognized that district court judges should examine an expert's ultimate conclusion "to determine whether they could reliably follow from the facts known to the expert and the methodology used." (*See* Pet. Writ Cert. at 14) (quoting *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 153 (3d Cir. 1999)); *see also Nelson v. Tenn. Gas Pipeline*, 243 F.3d 244, 254 (6th Cir. 2001) (finding that although there are commonly observed symptoms of PCB exposure documented in scientific literature, the expert's conclusion that PCB exposure caused the kinds of symptoms experienced by the plaintiffs in the case at issue was not reliable); *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 279 (5th Cir. 1998) (en banc) (noting that "several post-*Daubert* cases have cautioned about leaping from an accepted scientific premise to an unsupported one" and finding no scientific support for the expert's conclusion that exposure to any irritant at unknown levels triggers the asthmatic-type condition experienced by the plaintiff).

The district court's role as gatekeeper is compromised if expert testimony is admitted because the methodology is apparently sound, but the conclusion is detached from the facts of the case, test results, or the expert's analysis. This Court should grant certiorari in this case to clarify that the spirit and purpose of *Daubert* are compromised if courts scrutinize only an expert's methodology and not his or her conclusions.

B. Does *Daubert* Require a Heightened Level of Relevance?

This Court has ruled than an expert's testimony must "fit" the facts of the case if it is to help the trier of fact. *Daubert*, 509 U.S. at 591 (adopting the standard applied by Judge Becker in *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985)). The Court explained that Rule 702 "requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility." *Id.* at 592. This is a higher standard than the standard under Federal Rules of Evidence 401 and 402, which governs relevance generally. It recognizes that a district court has a special duty to examine purported expert testimony, testimony that by definition is outside the realm of an ordinary juror's scope of knowledge, to ensure it is based on reliable, scientific principles.

The Federal Rules were set up to tilt toward admissibility of ordinary evidence. Federal Rules of Evidence 401 and 402 allow for broad admissibility of evidence so long as it is "relevant," meaning that it has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." "The Rule's basic standard of relevance thus is a liberal one." *Daubert*, 509 U.S. at 588.

When the admissibility of evidence offered by those presented as experts is at issue, the Federal Rules of Evidence and this Court have recognized that additional safeguards are warranted. In *Daubert*, the Court correctly observed that while Rules 401 and 402 provide the "baseline" for admissibility, when expert testimony is offered, the more precise and rigorous requirements of Rule 702 speak to the issue. *Id.* at 587. In effect, Rule 702's requirement that "scientific, technical, or other specialized knowledge . . . assist the trier of fact to understand the evidence or to determine a fact in issue" trumps the otherwise liberal relevancy requirements of

the Federal Rules. In sum, the "sevens" are different than the "fours." *See id.* at 591 (finding that in cases involving expert testimony, Rule 702 "goes primarily to relevance").

Despite this Court's instructions, in determining the admissibility of expert testimony here, the Tenth Circuit quoted the broad relevancy standard of Rule 401. *Bitler*, 400 F.3d at 1234. It looked only to whether there was "a logical relationship between the evidence proffered and the material issue that the evidence is supposed to support," *id.*, rather than at the presence of the closer "fit" mandated by this Court. Due to its faulty analysis, the district court admitted expert testimony based on products that had a different design from the water heater at issue, and did not require the experts to account for those differences or to validate their theory.

As the Petitioner recognizes, the Second Circuit has also mistakenly looked to Rule 401 to determin the relevancy of expert testimony. (*See* Pet. Writ Cert. at 18.) In addition, it appears that the Fifth Circuit has occasionally gone down this erroneous path. *See Mathis v. Exxon Corp.*, 302 F.3d 448, 460 (5th Cir. 2002) (looking to Rule 401 to define relevancy under Rule 702). Most courts, however, have taken the approach that better protects against unreliable expert testimony, requiring a higher standard – the "fit" discussed in *Daubert*. (See Pet. Writ Cert. at 19-21); *see also Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 760-61 (8th Cir. 2003) (finding expert testimony regarding causation and damages was properly excluded when an expert's work was thorough, sophisticated, and often well-grounded in the relevant scientific literature, but disconnected from the plaintiff's theory of liability).

This case provides the Court with an opportunity to resolve this issue and reaffirm the higher bar that must be met with respect to relevance applicable to admission of expert testimony.

C. Does a Proffered Expert's Failure to Test a Theory, When Readily Verifiable Through Testing, Render it Unreliable and Inadmissible?

In *Daubert*, the Court instructed that expert testimony must be "ground[ed] in the methods and procedures of science" to satisfy the standard of evidentiary reliability. 509 U.S. at 590. The Court recognized that, first and foremost, what distinguishes theory or technique from admissible expert testimony is whether it can and has been tested. *Id.* at 593.

It may surprise some to learn that an originator of the scientific method was not a scientist, but none other than a lawyer. In 1620, Sir Francis Bacon, a barrister who rose to be Lord Chancellor of England under the rein of James I, published his seminal work, *Novum Organum*. Bacon believed that "investigating and discovering truth" about nature requires a repeating cycle of observation, hypothesis, *experimental tests*, and the need for independent verification. Francis Bacon, *Novum Organum* (1620), *reprinted in The Advancement of Learning and Novum Organum* 316-17, 332 (Justin McCarthy et al. eds., 1900).

The Court recognized these basic principles in *Daubert* and emphasized the importance of testing as a "key" to determining admissibility of expert testimony. 509 U.S. at 593. "Scientific methodology today is based on generating hypotheses *and testing them* to see if they can be falsified; indeed, this methodology is what distinguishes science from other fields of human inquiry." *Id.* (emphasis added) (citing scholarship recognizing the importance of testing in a scientific inquiry). Other courts have recognized the importance of this process in the courtroom. *See, e.g., Moore*, 151 F.3d at 276 ("[T]he party seeking to have the district court admit expert testimony must demonstrate that the expert's findings and conclusions are based on the scientific method, and,

therefore, are reliable. This requires some objective, independent validation of the expert's methodology."); *O'Key*, 899 P.2d at 672 ("The scientific method is a validation technique, consisting of the formulation of hypotheses, followed by observation or experimentation to test the hypotheses.").

It is not the case that testing is only important with respect to scientific evidence, and not technical or other specialized knowledge. In *Kumho Tire*, the Court found that Rule 702 made "no relevant distinction between 'scientific' knowledge and 'technical' or 'other specialized' knowledge" and found that the district court's gatekeeping obligation applied equally to all expert testimony. 526 U.S. at 147. As one commentator has recognized: "Although Rule 702 specifies that an expert may be qualified through experience, the Court's emphasis in *Daubert* on 'testability' suggested that an expert should not be allowed to base a conclusion solely on experience if the conclusion can be easily tested." Margaret A. Berger, *The Supreme Court's Trilogy on the Admissibility of Expert Testimony, in Reference Manual on Scientific Evidence* 9, 15 (Fed. Jud. Ctr. ed., 2d ed. 2000)

An expert's hypothesis, without testing, is rendered unsupported speculation. As a well-respected scientific research text states:

> The most important feature of an hypothesis is that it is a mere trial idea, a tentative suggestion concerning the nature of things. Until it has been *tested*, it should not be confused with a *law*. Unfortunately, in many fields, especially on the border lines of science, hypotheses are often accepted without adequate tests. Plausibility is not a substitute for evidence, however great may be the emotional wish to believe.

E. Bright Wilson, Jr., *An Introduction to Scientific Research* 26 (1952) (emphasis in original). In effect, the expert has thrown his or her hands in the air and exclaimed, "Gotcha!" after developing a reasonable theory to explain an event, but before verifying it. This is a common mistake that diligent federal judges can protect against through exercising their gatekeeping function.[2] As gatekeepers, judges have an obligation to keep theories out of the courtroom unless and until the expert's hypothesis is tested. Reliable expert testimony should not require a leap of faith.

Indeed, testing is particularly important in cases such as this one. Here, there are two competing possible causes. While not every guidepost outlined in *Daubert* will necessarily apply to expert testimony based on engineering principles and practical experience, here, the expert's theory could have been verified by an objective test – cheaply, easily and efficiently.

The situation in this case is analogous to the process of determining why a light bulb will not turn on. There are at least two likely potential causes. The bulb could be burned out. Alternatively, the bulb could be loose in the socket. Here, the "experts" declared to a jury that the light bulb was burned out without first shaking the bulb or attempting to tighten it. In such a situation, testing should be required and this Court should say so.

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[2] As college students are instructed in introductory level courses, "[t]he most fundamental error is to mistake the hypothesis for an explanation of a phenomenon, without performing experimental tests. Sometimes 'common sense' and 'logic' tempt us into believing that no test is needed. There are numerous examples of this, dating from the Greek philosophers to the present day." Frank L. H. Wolfs, Univ. of Rochester, Prof. of Physics, *Laboratory Experiments, Appendix E: Introduction to the Scientific Method, at* http://teacher.nsrl.rochester.edu/phy_labs/AppedixE/AppendixE.html.

As the authors of the treatise *Modern Scientific Evidence: The Law and Science of Expert Testimony* (1997 & Supp. 1999) have observed:

> Many courts are willing to reject testimony when it is clear that the expert could create better evidence. . . . Simply put, courts are beginning to wonder, if these theories and opinions are testable, why haven't they been tested?

Faigman, *supra*, at 666. Several courts have placed a heavy emphasis on testability, as discussed in the Petitioner's brief. (Pet. Writ Cert. at 24.) In fact, in a case similar to the one before the Court, the Eighth Circuit found a district court committed prejudicial error in failing to exclude the testimony of a master electrician where he "did no testing to bolster this . . . theory of fire cause and origin." *Weisgram v. Marley Co.*, 169 F.3d 514, 519-20 (8th Cir. 1999). The court found that the absence of such testing rendered his testimony "rank speculation" and "nothing more than pure conjecture" as to whether the manufacturer's baseboard heater was defective and caused a fire. *Id.*

Unfortunately, the Tenth Circuit did not apply the scientific principles embodied in *Daubert*. It did not require the experts in this case to produce "better evidence" through testing when readily available, and instead surpassed its discretion in applying the *Daubert* factors to abandon its gatekeeping function.

IV. THE COURT SHOULD TAKE THIS CASE TO PROVIDE GUIDANCE TO LOWER COURTS AND PRESERVE THE LETTER, PURPOSE AND SPIRIT OF *DAUBERT*

As Brooklyn Law School Professor Margaret A. Berger predicted shortly after *Kumho Tire*, "Numerous issues re-

main unresolved, and the possibility exists that splits in the circuits will result, particularly in connection with the proof of causation in toxic tort cases, the question that engaged the Court's interest in expert testimony in the first place." Berger, *supra*, at 38.

The Court should grant certiorari in this case to preserve both the letter and spirit of *Daubert*. This case presents the Court with a unique opportunity to provide guidance on three key areas of division. On each issue, the Tenth Circuit strayed from *Daubert*'s meaning and purpose. The improper interpretation of all three, as occurred in the instant case, can and did render the *Daubert* standard meaningless. It sends the wrong signal at the wrong time to district court judges in the Tenth Circuit and the rest of the country.

CONCLUSION

For the foregoing reasons, *amici curiae* the American Tort Reform Association and National Association of Manufacturers respectfully request that this Court grant the Petition for a Writ of Certiorari in this action.

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No. 04-1485

IN THE

Supreme Court of the United States

WHITE-RODGERS,
A DIVISION OF EMERSON ELECTRIC COMPANY,
Petitioner,

v.

FRED D. BITLER, ET AL.,
Respondents.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Tenth Circuit

REPLY BRIEF FOR PETITIONER

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REPLY BRIEF FOR PETITIONER

Plaintiffs' brief in opposition is almost entirely nonresponsive. Plaintiffs fail to rebut—indeed, they virtually ignore—the arguments in the petition demonstrating why this Court's guidance is needed to resolve the conflicts in the lower courts over the proper application of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Instead, plaintiffs devote substantial portions of their brief to a lengthy description of the purported qualifications of their experts, Opp. 5-13, and to their claim that they will prevail on the merits. Opp. 16-21.

Of course, a respondent's claim that it will win on the merits is not a basis for denying review, and the fact that plaintiffs spend less than one page—*see* Opp. 15—attempting to rebut the existence of the circuit splits discussed in the petition reflects their implicit acknowledgment that White-Rodgers has satisfied the standard for obtaining certiorari. Indeed, plaintiffs do not seriously contest White-Rodgers's showing that the lower courts have taken sharply differing approaches to *Daubert*'s gatekeeping requirements. Nor do plaintiffs address a single one of the court of appeals cases discussed in the petition, or for that matter even mention *General Electric Co. v. Joiner*, 522 U.S. 136 (1997)—a case discussed at length by White-Rodgers.

Simply put, plaintiffs offer no reason for this Court to deny review of a case that exacerbates several splits in the lower courts over *Daubert* and its progeny. Plenary review is warranted to resolve the conflict over whether *Daubert* permits courts to consider experts' conclusions as well as their methodologies; to dispel the confusion over whether *Daubert*'s "fit" requirement demands a heightened level of relevance, or whether it can be satisfied by a mere showing of relevance under Federal Rule of Evidence 401; and to clarify whether a district court abuses its discretion by allowing an expert to present his untested theory of causation to the

jury, where the theory meets *none* of the *Daubert* reliability factors and could have been readily verified through testing.

These questions are important and recurring. As the American Tort Reform Association and the National Association of Manufacturers explain in their *amicus* brief, "[e]xpert witnesses are given extraordinary privileges in court" and as a result, "[b]ad science presented as fact by experts can result in removal of beneficial products from the market and [have] profound effects on the American economy." ATRA Br. at 4, 6. This Court should grant review, resolve the conflicts plaguing the lower courts, and make clear that *Daubert*'s gatekeeping requirement must be enforced strictly and with rigor.

I. This Case Squarely Presents Three Issues Of Law, And Plaintiffs' Factual Recitation Is Irrelevant.

The bulk of plaintiffs' brief consists of a lengthy factual recitation, followed by insistent assertions that the Tenth Circuit and plaintiffs are correct on the merits. The apparent purpose of plaintiffs' approach is to convince this Court that the decision below is "fact-bound," Opp. 1, and dependent on resolution of contested factual issues rather than questions of law.

Plaintiffs are wrong. The Tenth Circuit committed several fundamental *legal* errors in its application of *Daubert*'s gatekeeping requirement. For example, it held that in determining an expert's reliability, "a trial court's focus generally should not be upon the precise conclusions reached by the expert, but on the methodology employed in reaching those conclusions." Pet. App. 9a. It also held, in applying *Daubert*'s requirement that there be a "fit" between the expert's opinion and the facts of the particular case, that "[a] trial court must look at the logical relationship between the evidence proffered and the material issue that evidence is supposed to support to determine if it advances the purpose of aiding the trier of fact"—thus indicating that it was applying a Rule 401 relevance standard. *Id.* at 10a; *see also id.* at

19a (rejecting White-Rodgers's "fit" challenge on the basis that the testimony of plaintiffs' experts "involves a reliable method that would aid the jury in resolving a factual dispute").

The questions presented by White-Rodgers's petition focus on the legal standards for the admission of expert testimony applied by the district court and Tenth Circuit. Thus, plaintiffs' extended discussion "set[ting] forth each of their experts, their skills, training and experience, and the substance of their testimony," Opp. 5, is irrelevant to the issues before this Court at the certiorari stage.

Moreover, although plaintiffs contend that White-Rodgers "generally mischaracterizes the expert testimony presented at trial," Opp. 1, the entire "expert testimony" section of plaintiffs' brief is devoid of a single citation to the record. *See* Opp. 5-13. Apparently viewing themselves as unencumbered by any need to support their statements with evidence, plaintiffs make factual assertions that have absolutely *no* support in the record, such as their claim that a particle that is 85 micrometers in size could keep the valve from shutting.[1]

In short, *regardless* of plaintiffs' depiction of the facts and the purported qualifications of their experts, the ques-

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[1] Plaintiffs' experts never performed any tests that would have determined the size of a particle capable of keeping the valve open. Although Bullerdiek opined that a particle the size of a human hair could be sufficient, there is no evidence in the record about the size of a human hair, and Bullerdiek's opinion is utterly speculative and rests entirely on his *ipse dixit* assertion. Plaintiffs' brief is riddled with inaccuracies and misleading statements, such as their claim that this case was "decided . . . by more than a dozen federal judges," Opp. 1, and their assertion that "the problems of copper sulphide contamination persisted" after the introduction of a screen mechanism in 1978, Opp. 2, when in fact there is no evidence of leaks caused by copper sulfide particles in *screened* gas controls. Nor is there any merit to plaintiffs' claim that White-Rodgers somehow endorsed plaintiffs' theory of defect by "offer[ing] at trial to stipulate that sulfide particulate contamination has caused intermittent valve leaks." Opp. 4. The offered stipulation only concerned *unscreened* gas controls.

tions presented by White-Rodgers's petition focus on whether this Court's review is warranted to resolve the conflicts over the legal standards governing the admissibility of expert testimony. As shown below, on that critical question, plaintiffs offer virtually no rebuttal.

II. Three Substantial And Recurring *Daubert* Questions Warrant This Court's Review.

A. This Court Should Resolve The Conflict Over Whether *Daubert* Permits Consideration Of An Expert's Conclusion.

The Tenth Circuit refused to consider whether plaintiffs' experts' *conclusions*—as distinct from their *methodologies*—were reliable. Pet. 12-15. In focusing on the experts' general testimony that "copper sulfide particles are the kind of thing that when lodged on the valve seat can cause leaks," Pet. App. 14a, the court of appeals ignored the complete lack of support for the experts' conclusion that the *minuscule* particles present *in this case*, when combined with grease, could have held open the safety valve. By doing so, the Tenth Circuit followed the approaches employed in the Second and Eighth Circuits, in which district courts are instructed *not* to evaluate the reliability of an expert's ultimate conclusion, as long as his general methodology appears reliable. *See, e.g.*, *Campbell v. Metro. Prop. & Cas. Ins. Co.*, 239 F.3d 179, 186 (2d Cir. 2001); *Smith v. BMW North America, Inc.*, 308 F.3d 913, 919 n.9 (8th Cir. 2002).

The "methodology-only" approach is based on a sentence from *Daubert* in which this Court remarked that the "focus" of a district court's reliability inquiry "must be solely on principles and methodology, not on the conclusions that they generate." 509 U.S. at 595. Although this Court appeared to modify its approach in *Joiner*, 522 U.S. at 146, where it cautioned courts against admitting testimony where there is "too great an analytical gap between the data and the opinion proffered," many courts, such as the Tenth Circuit, continue to rely on the *Daubert* language, while others construe *Joiner* as having modified *Daubert*. *See, e.g.*, *Heller v.*

Shaw Industries, Inc., 167 F.3d 146, 153 (3d Cir. 1999) (district courts must "examine the expert's conclusions in order to determine whether they could reliably follow from the facts known to the expert and the methodology used"); *Ruiz-Troche v. Pepsi-Cola of Puerto Rico Bottling Co.*, 161 F.3d 77, 81 (1st Cir. 1998) (after *Joiner*, "trial judges may evaluate the data offered to support an expert's bottom-line opinions to determine if that data provides adequate support to mark the expert's testimony as reliable"). Only this Court can resolve this conflict and the apparent tension between *Daubert* and *Joiner*.

Although White-Rodgers discussed this issue at length in its petition, and cited scholarly commentary analyzing the "significant split among the circuits on this question," Pet. 12-15, plaintiffs have little to say in response. They simply *assert* that "[t]here is no split among the circuits on the issues raised in the Petition." Opp. 15. They do not even cite, let alone discuss, the many cases examined in White-Rodgers's petition.

Plaintiffs contend that a circuit split could arise only if another circuit court were "to hold that exact or very similar proffered testimony was inadmissible." Opp. 15. But this Court has routinely granted certiorari in cases where the lower courts have diverged in their application of federal law, regardless of whether the cases involved identical facts. In fact, in *Daubert* itself, this Court "granted certiorari in light of sharp divisions among the courts regarding the proper standard for the admission of expert testimony." 509 U.S. at 585 (citation omitted). Certiorari is warranted here for the same reason.

Ironically, plaintiffs cite a law review note, *Reliable Evaluation of Expert Testimony*, 116 HARV. L. REV. 2142 (2003), to support their contention that there is little confusion in the courts over *Daubert* questions. Opp. 15. But that commentator actually concludes that *Daubert* and its progeny have "yielded inconsistent approaches" and the "[i]nconsistency in the substantive standards for assessing

expert testimony is troublesome [because] it means that similarly situated litigants are treated differently based on where they litigate, and it promotes forum shopping." 116 HARV. L. REV. at 2146-47.

Absent guidance from this Court, the circuits will continue to apply "inconsistent approaches" to *Daubert*'s gatekeeping requirement and the question whether a district court may consider experts' conclusions as well as their methodologies in assessing reliability.

B. This Court Should Clarify Whether *Daubert*'s "Fit" Requirement Imposes A Heightened Standard Of Relevance.

Plaintiffs contend that "there is no significant issue of federal law at stake in this case," because there is no compelling reason "for altering" Federal Rules of Evidence 401 and 702. Opp. 14-15. This *non sequitur* is not a reason for denying certiorari.

White-Rodgers, obviously, is not arguing that Rule 401 or Rule 702 should be "altered." Rather, White-Rodgers's argument is that the Tenth Circuit's approach to *Daubert*'s "fit" requirement—essentially treating it as akin to Rule 401's relevancy standard—is inconsistent with *Daubert*, *Joiner*, and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). Moreover, the Tenth Circuit's approach conflicts with the approaches followed by other courts of appeals, such as the Third Circuit and the Eleventh Circuit. *See In re Paoli Railroad Yard PCB Litig.*, 35 F.3d 717, 745 n.13 (3d Cir. 1994) ("the standard for fit is higher than bare relevance"); *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1310 (11th Cir. 1999) (contrasting Rule 401's "liberal admission of evidence standard" with *Daubert*'s "more stringent standards of reliability and relevance").

Plaintiffs make no attempt to reconcile the Tenth Circuit's application of a relaxed relevance standard with the far more rigorous standard applied in other circuits. *See* Pet. 15-21. Instead, plaintiffs simply rely on their utterly unsupported and patently incorrect assertion that "[t]here is no split

among the circuits on the issues raised in the Petition." Opp. 15.

A heightened relevance standard gives meaning to this Court's description of "fit" in *Daubert*, and prevents expert witnesses from offering potentially misleading testimony that does not have the requisite connection to the underlying data or facts. In this case, plaintiffs' experts failed to explain how the tiny copper sulfide particles that were found downstream from the mesh screen could have prevented the safety valve from closing properly.[2] Had the district court applied the heightened relevance standard contemplated by *Daubert*, plaintiffs' experts would not have been allowed to present their bogus theories to the jury. This Court should grant review and reject the Tenth Circuit's approach.

C. Review Is Warranted To Clarify When Testing Is Necessary To Establish Reliability.

Plaintiffs claim that their experts should not have been required to test their causation theory before presenting it to the jury. Opp. 18. Notably, plaintiffs do *not* contend that such testing would have been difficult, or time-consuming, or otherwise burdensome or impractical. Nor do they dispute that such testing would have quickly and easily confirmed the reliability of their experts' theory—that minuscule copper sulfide particles, combined with grease, prevented the safety valve from closing in this case.

Instead, plaintiffs assert, again without citation to the record, that there is "general acceptance in the scientific com-

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[2] Plaintiffs contend that White-Rodgers has previously argued in favor of the same theory that plaintiffs' experts advanced in this case. Opp. 16. That is not true. First, White-Rodgers has never claimed that minuscule specks of copper sulfide of the kind at issue in this case could prevent a safety valve from shutting properly. Second, the statements that plaintiffs attribute to White-Rodgers on page 16 of their opposition brief are from cases involving pre-1978 safety valves, *i.e.*, valves that did *not* contain screens like the one in the Bitlers' gas control that prevent larger copper sulfide particles from passing through.

munity" for the proposition that "small particles can combine with grease on the safety valve seat of a propane gas control and cause a leak and subsequent explosion." Opp. 18. But plaintiffs' experts can point to nothing—other than their own self-serving statements—to show that any reputable scientist agrees with them. In the absence of either testing or general acceptance, their theory is a classic example of "opinion evidence which is connected to existing data only by the *ipse dixit* of the expert." *Joiner*, 522 U.S. at 146. Indeed, it is for this very reason that the district court and the Tenth Circuit should have required plaintiffs' experts to test their theory.

Plaintiffs contend that because courts have flexibility under *Daubert* and *Kumho Tire* to determine how best to assess reliability, district courts enjoy *absolute* discretion in deciding which, if any, factors to apply in a given case. Opp. 17-20. Plaintiffs quote this Court's observation in *Kumho Tire* that the *Daubert* factors "may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of the testimony." Opp. 20 (quotation omitted). Of course, that language from *Kumho Tire* does not resolve whether a failure to require testing amounts to an abuse of discretion in a product liability case like this one, where an expert offers a theory of causation that is not otherwise reliable or well-established in the scientific community, and that could easily be verified through testing.

This case provides the opportunity to give force to the recognition that although "the *Daubert* factors are not holy writ, in a particular case the failure to apply one or another of them may be unreasonable, and hence an abuse of discretion." *Kumho Tire*, 526 U.S. at 159 (Scalia, J., concurring, joined by O'Connor & Thomas, JJ.). Indeed, "the discretion [*Daubert*] endorses—trial-court discretion in choosing the manner of testing expert reliability—is not discretion to abandon the gatekeeping function," *id.* at 158-59, yet the approach followed by the courts in this case amounts to a virtual abandonment of that responsibility. *See* ATRA Br. at

15-18 (discussing cases and scientific treatises emphasizing the importance of testing as an indicator of reliability).

As the *Kumho Tire* majority explained, district courts "should consider the specific factors identified in *Daubert* where they are reasonable measures of the reliability of expert testimony." *Id.* at 152. The contrast between the Tenth Circuit's approach in this case—rejecting testing as a measure of reliability—and the emphasis that many other courts have placed on testing, *see* Pet. 24, highlights the need for this Court to make clear that while a district court's discretion under *Daubert* may be considerable, it is not absolute.

CONCLUSION

For all the reasons set forth above and in the petition, the petition for a writ of certiorari should be granted.

Respectfully submitted.

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